UNDERGROUND CABLE FAULT LOCATING EQUIPMENTS & SYSTEMS

TFL 6 **Cable Fault Pre-locator**

Description

Cable Fault Pre-locator TFL 6 is a latest micro-processor controlled, menu driven, digital technology to offer precise fault distance in any type of metallic cables.

It is a portable equipment easy to use, single - phase unit for cable fault pre-location of short and open circuit fault by using the Time Domain Reflection (TDR) method in low, medium and high voltage cables.

Another Impulse Current Method (ICM) is available and use for pre-location of low insulation or intermittent nature cable fault by coupling with High voltage surge tester.

The maximum measuring ranges enable for pre-location of cable fault is 16 km.

Application

It is used for pre-location of short circuit, open circuit fault distance in TDR mode and Low insulation / high resistance / flashing fault in ICM mode with the help of suitable High voltage surge tester by power transmission and distribution network companies and service providers.

Features

- Two selectable work mode Time Domain Reflection (TDR) & Impulse Current (ICM) Method.
- Capable to locate faults in any type of metallic single core armored or multi-core armored cables.
- Comparison facility of faulty cable with healthy.
- Maximum measuring range up to 16 km.
- Interactive Menu - Guidance.
- Auto cursor positioning at fault point.
- Zoom facility of fault trace incase of difficult pre-location.
- Printer connection through PC via RS 232.
- Use high speed Micro-controller
- Memory up to 50 echo - grams.
- Big LCD display with back light facility.
- Internal battery capable of working for maximum 5 hours continuously.
- Auto shut down under idle running condition.
- Manual gain adjustment facility.
- Intelligent charger for charging of internal batteries.
- Compact, light weight and user friendly menu driven operation.

Working Principle

TDR Mode
A narrow electromagnetic pulse of 40 ns -3.56 us with a fast rise time is sent on the cable that reflects back from the fault point /far end where the impedance was change. The VOP for each cable depending on the cable dimension is set. The distance to the fault is then computed automatically and displayed in meter on screen.

ICM Mode
A HV surge tester applies dc high-voltage and high energy across the fault to the cable under test that induces a breakdown or flash over across the fault in the cable and the transient are developed at the fault point .The transient travels back and forth between the HV surge tester and the fault. The current transient is measured using a current transformer with a frequency response adequate to resolve only the edges of the current transient. The distance to the fault is then computed automatically and displayed in meters on screen.

Standard Accessories

- TDR measurement testing cable
- ICM measurement testing cable
- RS 232 Connecting cables
- Re-chargeable battery charger / Adapter
- Ext Current Coupler
- Software CD
- Carrying case
- Instruction / User Manual

Standard Warranty	**One Year**
Other models available	**Cable Fault Pre-locator TFL 8**

Specifications

Operating Mode	TDR and ICM
Measuring Range	0 - 16 Km (In 0.5, 1, 2, 4, 8 and 16 km selectable ranges)
Voltage of Transmitting Pulse	30 V
Width of Transmitting Pulse	40 ns - 3.56 us
Voltage Withstand	400 VAC (50/60Hz)
Output Impedance	5 - 80 Ohm
Sampling Rate	100 MHZ (10 ns)
VOP Range	90 - 300 m/µs
Number of Echograms Memories	50 Memories
Display	320 x 240 dots
Resolution TDR Mode	≤± 1 m when detecting range ≤4 Km ≤± 4 m when detecting range >4 Km
ICM Mode	≤± 4 m when detecting range ≤4 Km ≤± 16 m when detecting range>4 Km
Charging Input Supply Voltage	110 - 265 V AC, 50Hz
Charger Output Voltage	8.4 V ± 10% DC
Operation Time of Batteries	5 Hours Approx
Storage Temp.	-40 Deg C ~ +60 Deg C
Working Temp.	-20 Deg C ~ +55 Deg C
Dimensions	345 (L) × 290 (W) ×152 (H) mm
Weight	4.5 Kg Approx
Type of Protection	Splash proof and dust protected IP 54

Telemetra Systems Pvt. Ltd.

www.telemetrics.in

Pune

5, Electronic Sadan II, MIDC, Bhosari,
Pune - 411026
Maharashtra, INDIA.

+91-20-27122936 / 27123176
9011083682

sales@telemetrics.in
customersupport@telemetrics.in

CIN
11-045075

Regional Offices

Kolkata
Kunal@telemetrics.in I 09748487005

Delhi
vijayp@telemetrics.in I 09654045183

Specification subject to change without notice